

## REMARKS

Claims 1-38 are pending. Claims 25-37 were not elected and are withdrawn. Claims 1, 6, 8, 11, 13, 15, 17, 19, 21, and 23 are amended. Claim 9 is canceled. New claim 38 is added. No new matter has been added.

On Applicants' Form PTO-1449 sheet 1(A) of 3, the Examiner did not initial reference A.R, A.S, and A.T. Applicants respectfully request the Examiner indicate consideration of these three references.

Applicants thank the Examiner and the Supervisory Examiner for the January 9, 2007 personal interview with Applicants' representative Dr. Beverly Lyman. As required, Applicants state that the substance of the interview was the pending claims, support for description and enablement, and proposed amendments.

## CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claims 1-25 are rejected under 35 U.S.C. §112, ¶1 as not enabled.

The Examiner states

Claims 1 and 8 are attributed to a therapeutic method of administering to a patient N-desmethyl levomepromazine (NDM LMP) [*sic*] does not reasonably provided [*sic*] enablement for the method. The specification does not provide any examples or case studies to describe the method of administering NDM LMP to a patient." (p. 2).

and

The guidance given by the specification for a therapeutic method comprising administering NDM LMP to a patient to provide various antagonist effects is none. All of the guidance provided by the specification is directed toward the in vitro receptor binding studies and not in vivo. (p. 3)

The legal standard for enablement is that a patent must contain a description that enables one skilled in the art to make and use the claimed invention. *DeGeorge v. Bernier*, 226 U.S.P.Q. 758 (Fed. Cir. 1985). Its purpose is to assure that the inventor provides sufficient information about the claimed invention that one skilled in the art can make and use it without undue experimentation, relying on the specification and knowledge in the art. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001 (Fed. Cir. 1991) (emphasis added).

Applicants have amended claim 8 (by incorporating the limitations of dependent claim 9) to recite outcome in terms of a steady state serum concentration, a readily verifiable parameter. Applicants have established that the claimed agent binds to the stated receptors (see at least Tables 1-6). Goodman and Gilman's The Pharmacologic Basis of Therapeutics, Eighth Edition, Pergamon Press, Elmsford, New York 1990, which Applicants have incorporated by reference (page 5, top), teaches:

The effects of most drugs result from their interaction with macromolecular components of the organism. Such interaction alters the function of the pertinent component and thereby initiates the biochemical and physiological changes that are characteristic of the response to the drug....The terms *receptive substance* and, more simply, *receptor* were coined to denote the component of the organism with which the chemical agent was presumed to interact.

...

In the discussion above, the term *receptor* has been used operationally to denote any cellular macromolecule to which a drug binds to initiate its effects. The functional properties of the receptors that have been used as examples are evident. (pp. 33, 35, emphasis added).

Thus, agent administration results in the claimed outcome due to its established receptor antagonist effect. ("NDM LMP binds with substantially equivalent affinity to dopamine, serotonin, histamine,  $\alpha$  adrenergic, and muscarinic receptors as the parent LMP, achieves comparable serum concentration as the parent LMP, exhibits comparable serum protein binding (99%) as the parent LMP, and results in at least substantially equivalent antagonist activity as the parent LMP", present specification at p. 4, lines 10-14, emphasis added).

Applicants' claimed method is enabled in their present specification by disclosure of formulations (e.g. salt, free base), doses (e.g. about 1 mg/day to about 50 mg/day for oral administration), excipients (surfactants, buffers), routes of administration (e.g. parenteral, enteral), at least at page 7, line 6 to page 11, line 6.

Regarding claims 11-22 and new claim 38, they are amended to recite administration to a cell and effecting receptor-mediated effects. Support for the amendments is found at least at p. 12 line 21 and the Example at pp. 13-17. Because the Examiner found that Applicants' specification did provide guidance toward in vitro

receptor binding studies (p. 3), Applicants assert that claims 11-22 and 38 are allowable.

Claims 5, 6, 8, 9, 10, and 25 are rejected under 35 U.S.C. §112, ¶2 as indefinite. The Examiner provides no basis for rejection of claims 10 and 25, thus Applicants cannot respond.

Regarding claim 5, Applicants assert that one skilled in the art would appreciate a substantially same steady state serum concentration is sufficiently definite, e.g., using a conventional scientific parameter of within two standard deviations of the mean.

Regarding claims 8 and 9, now canceled with its limitations incorporated in claim 8, Applicants assert that one skilled in the art would appreciate that a substantially same pharmaceutical effect is sufficiently definite, e.g., using conventional pharmacologic parameters of therapeutic index, clinical outcome, etc.

Regarding claim 6, Applicants have amended it to clarify the language the Examiner finds unclear.

For at least the above reasons, Applicants assert that the rejections under U.S.C. §112 have been overcome. Therefore, Applicants respectfully submit that this case is in condition for allowance and request allowance of the pending claims.

If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. Applicants also have submitted all fees believed to be necessary herewith. Should any additional fees or surcharges be deemed necessary, the Examiner has authorization to charge fees or credit any overpayment to Deposit Account No. 23-3000.

Respectfully submitted,  
WOOD, HERRON & EVANS, L.L.P.

By /Randall S. Jackson, Jr./  
Randall S. Jackson, Jr.  
Reg. 48,248

2700 Carew Tower  
Cincinnati, Ohio 45202  
(513) 241-2324  
FAX (513) 241-6234